

MOISTURE-CURABLE, POLYETHER URETHANES
WITH REACTIVE SILANE GROUPS AND THEIR USE
AS SEALANTS, ADHESIVES AND COATINGS

CROSS REFERENCE TO RELATED PATENT APPLICATION

This application is a Continuation-In-Part of U.S. Ser. No. 10/160,479, filed
May 31, 2002. *now abandoned.*

FIELD OF THE INVENTION

The present invention relates to a process for preparing moisture-
curable urethanes containing reactive silane groups from polyether polyols
having a low degree of unsaturation and to the use of these polyurethanes
as sealants, adhesives and coatings.

BACKGROUND OF THE INVENTION

Polyether urethanes containing reactive silane groups, also referred
to as silane-terminated polyurethanes (STPs), and their use as sealants
and adhesives are known and described, e.g., in U.S. Patents 5,554,709;
4,857,623; 5,227,434 and 6,197,912; and WO 02/06367. The silane-
terminated polyurethanes may be prepared by various methods. In one
method the silane-terminated polyurethanes are prepared by reacting
diisocyanates with polyether polyols to form isocyanate-terminated
prepolymers, which are then reacted with aminosilanes to form the silane-
terminated polyurethanes. The sealants may also be prepared by reacting
unsaturated monools with diisocyanates to form intermediates containing
unsaturated end groups and then converting these unsaturated groups to
alkoxysilane groups by hydrosilylation. In another method the sealants
are prepared in one step by the reaction of polyether diols with
isocyanatosilanes

To be useful as sealants the silane-terminated polyurethanes
should have a number average molecular weight of 6000 to 20,000. One

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